

Edwards

## 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Coal Fired Boilers

#### 7.1.1 Description

The Permittee operates three coal-fired boilers for electric generation. Two boilers, with nominal capacities of 1523 mmBtu/hour and 3321 mmBtu/hour, are served by one stack. The third boiler, which has a nominal capacity of 4594 mmBtu/hour, is served by a separate stack. These boilers also have the capability to fire at various modes such as combination of coal, natural gas and/or fuel oil as their principal fuel. In addition to coal, these boilers fire fuel oil as auxiliary fuel during startup and for flame stabilization.

Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators (ESP). The ESP are preceded by flue gas conditioning (dual feed and SO<sub>3</sub> injection system), which the Permittee operates as needed to facilitate compliance with the applicable PM emission standards. Nitrogen oxide (NO<sub>x</sub>) emissions from the boilers are controlled by low-NO<sub>x</sub> burners (LNB). Boiler 3 is equipped with a selective catalytic reduction (SCR). The Permittee currently operates the SCR on an as needed basis to comply with applicable NO<sub>x</sub> emission standards.

#### 7.1.2 List of Emission Units and Air Pollution Control Equipment

These unit-specific conditions address the following emission units:

Boiler I.D.	Description	Control Equipment
BLR1	Riley Stoker Boiler Nom. 1,523 mmBtu/hr (1960)	LNB, FGC and ESP
BLR2	Riley Stoker Boiler Nom. 3,321 mmBtu/hr (1968)	LNB, FGC and ESP
BLR3	Foster Wheeler Boiler Nom. 4,594 mmBtu/hr (1972)	LNB, SCR, FGC and ESP

#### 7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.

- b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards in Condition 7.1.4(a) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202 for boiler 3, and 35 IAC 212.203 for boilers 1 and 2), and Condition 7.1.4(d) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.161, and 201.262, as the Permittee

20% opacity

CO

PM

has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
  - A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
  - B. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting and reporting requirements of Conditions 7.1.9(c) and (g) and 7.1.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 7.1.4(a) (35 IAC 212.123), <sup>30% opacity</sup> Condition 7.1.4(b) (35 IAC 212.203 for Boilers 1 and 2 and 35 IAC 212.202 for Boiler 3), and Condition 7.1.4(d) (35 IAC 216.121), in the event of a malfunction or breakdown of an affected boiler, including the coal pulverizer, the ash removal system, or the electrostatic precipitator (including flue gas conditioning). This authorization is provided pursuant to 35 IAC 201.149, 201.161, and 201.262, as the Permittee has applied for such authorization in

PM —  
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§60.2  
Malfunction means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in a normal or unusual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

The "Summary report" format in 7.1.10-2(d)(i) is taken from 40 CFR 60.7(d), so assume definitions in general provisions apply)

its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(c) and (h), 7.1.10-2(d) and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.



#### 7.1.4 Applicable Emission Standards

- a. The affected boilers shall comply with the standard in Condition 5.2.2(b) [35 IAC 212.123], which addresses the opacity of the emission of smoke or other particulate matter from the affected boilers.
- b.
  - i. The emissions of PM from affected boiler 1 shall not exceed 0.20 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.203. This standard applies because the affected boiler qualifies for the alternative standard provided by this rule, as recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, this boiler had an hourly emission rate based on the stricter of the original design or equipment performance test conditions that was less than 0.20 lb/mmBtu of actual heat input, i.e., 0.15 lb/mmBtu. Thereafter, under this rule, the emission rate is not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.20 lb/mmBtu.
  - ii. The emissions of PM from the affected boiler 2 shall not exceed 0.15 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.203, as also recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. As of April 14, 1972, this boiler had an hourly emission rate of 0.10 lb/mmBtu. Thereafter, under this rule, the emission rate is not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.15 lb/mmBtu.
  - iii. The emissions of PM from affected boiler 3 shall not exceed 0.10 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.202.
- c.
  - i. The average SO<sub>2</sub> emissions from the affected boilers as a group shall not exceed 4.71 lb/mmBtu of actual heat input, on a daily basis, pursuant to 35 IAC 214.561(a).

The average SO<sub>2</sub> emissions from any one affected boiler may not exceed 6.6 pounds of SO<sub>2</sub> per mmBtu of actual heat input on a daily basis, pursuant to 35 IAC 214.561(b).

SO<sub>2</sub> emissions for all three affected boilers, as a group, may not exceed 34,613 pounds of SO<sub>2</sub> per hour, on a 24-hour average basis, pursuant to 35 IAC 214.561(c).

- d. The emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- e. The affected boilers are subject a NOx emission standard pursuant to Section 407 of the Clean Air Act and 40 CFR Part 76, as addressed in Condition 6.2.2 and Attachment 5 of this permit.
- f. The affected boilers are each subject to the following requirements related to NOx emissions pursuant to 35 IAC Part 217 Subpart V:
  - i. During each ozone control period (May 1 through September 30):
    - A. The emissions of NOx from an affected boiler shall not exceed 0.25 lb/mmBtu of actual heat input based on a ozone control period average for that unit, pursuant to 35 IAC 217.706(a), or
    - B. If the Permittee elects to participate in a NOx averaging plan, the emissions of NOx from the affected boiler and other eligible EGU that are participating in such NOx averaging demonstration shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period for the EGU participating in the demonstration, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) EGU at this source, which are also authorized by this permit to participate in a NOx averaging demonstration, and (2) other EGU that are authorized to participate in a NOx averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of those EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NOx for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NOx Trading Program.

- ii. If the Permittee elects to have an affected boiler comply by participation in a NOx averaging demonstration as provided for and authorized above:
  - A. The affected boiler shall be included in only one NOx averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).

**Public Notice  
Proposed Issuance of Clean Air Act Permit Program Permits  
and Notice of Public Hearing for  
the Midwest Generation, Inc. Powerton Plant and  
Central Illinois Light Company's Duck Creek and E.D. Edwards Plants**

Midwest Generation EME, LLC, 440 South LaSalle Street, Suite 3500, Chicago, has requested Clean Air Act Permit Program (CAAPP) permit from the Illinois Environmental Protection Agency for its Powerton power plant in Pekin. The Powerton plant is located at 13082 E. Manito Road in Pekin and has a four coal-fired boilers and other related emission units.

Central Illinois Light Company d/b/a Ameren CILCO, 1901 Chouteau Avenue, St. Louis, Missouri, has requested Clean Air Act Permit Program (CAAPP) permits from the Illinois Environmental Protection Agency (Illinois EPA) for its Duck Creek and E.D. Edwards coal fired power plants. The Duck Creek power plant is located at 17751 N. Cilco Road in Canton and has a coal-fired boiler, an oil-fired peaking turbine and other related emission units. The E.D. Edwards power plant is located at 7800 South CILCO Lane in Bartonville and has three coal fired boilers and other related emission units.

The CAAPP is Illinois' operating permit program for major sources of emissions, as required by Title V of the Clean Air Act. The conditions of CAAPP permits are enforceable by the public, as well as by the USEPA and Illinois. **CAAPP permits may contain new and revised conditions established under permit programs for new and modified emission units, pursuant to Title I of the federal Clean Air Act, thereby making them combined Title V and Title I permits.**

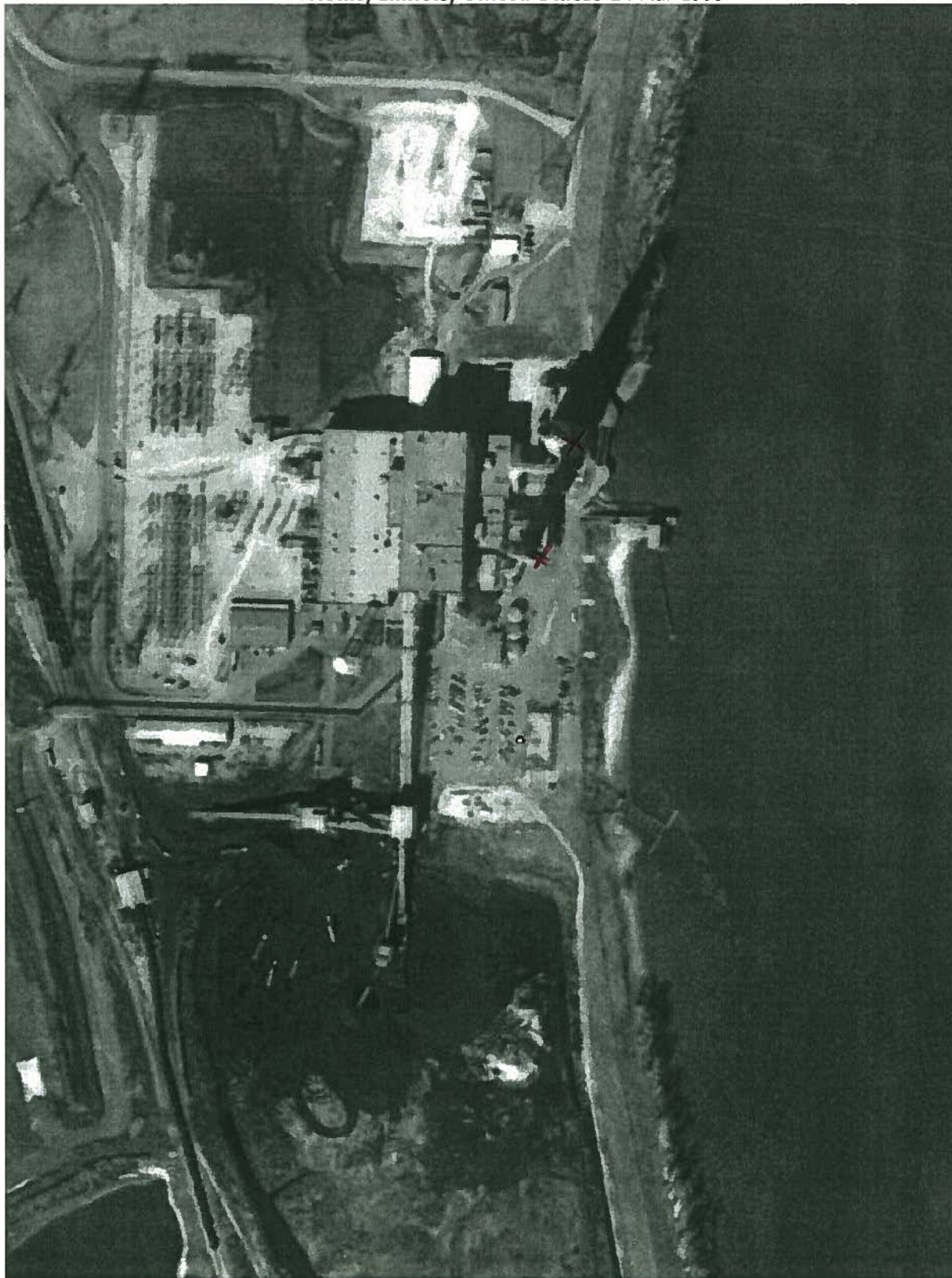
**The Illinois EPA will hold a public hearing on August 21, 2003 at 7:00 p.m. at the Gateway Building, Ballroom, 200 NE Water Street in Peoria.** The hearing will be held by the Illinois EPA to receive comments and data and to answer questions from the public prior to making final decisions concerning these two applications. Lengthy comments and questions should be submitted to the Illinois EPA in writing. Written comments must be postmarked by midnight, September 28, 2003, unless otherwise specified by the hearing officer. Comments need not be notarized and should be sent to Illinois EPA Hearing Officer, Re: Powerton/DuckCreek/Edwards CAAPP, 1021 N. Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276.

The hearing will be held under the provisions of Subpart A of the Illinois EPA's "Procedures for Permit and Closure Plans" 35 Ill. Adm. Code 166. All questions about the hearing procedure, requests for copies of the hearing rules, or requests for special needs interpreters should be directed to the Hearing Officer, address above. Requests for interpreters (including sign language or other special needs) must be made to the Hearing Officer by August 6, 2003.

Persons wanting more information may review the Illinois EPA's project summary and draft permit at [www.epa.gov/region5/air/permits/ilonline.htm](http://www.epa.gov/region5/air/permits/ilonline.htm) (please look for the





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